providing a single buffer memory having a data port coupled to all of the disk drive data ports for transferring digital data;

providing a series of registers forming a common pipeline disposed in between the disk drive data ports and the buffer memory data port;

providing a single address counter for addressing consecutive locations in the buffer memory;

sending read commands to all of the disk drives so as to initiate read operations in all of the disk drives;

waiting until read data elements are ready at all of the disk drive data ports;

after read data elements are ready at all of the disk drive data ports, synchronously retrieving and storing the read data elements from all of the disk drive data ports into consecutive locations in the buffer memory under addressing control of the single address counter;

wherein said synchronously retrieving and storing the read data elements from all of the disk drive data ports includes clocking the read data through [a] the common pipeline so as to form a contiguous word serial data stream through the pipeline;

concurrently computing redundant data from the read data while the read data moves through the pipeline;

and, if a failed drive has been identified, substituting the computed redundant data into the word serial data stream in lieu of the failed disk drive data so as to form corrected read data; and

storing the [word serial data stream] corrected read data into the buffer memory thereby providing the requested read data without incurring delay to reconstruct data stored on the failed disk drive and without storing erroneous data in the buffer memory.

REMARKS

Claims 1-19 are pending. The specification is amended to insert the patent number of the parent case, and to change the numbering of an element that was misnumbered in figure 9. Figure 9 is amended to correct a duplicate reference number. The Examiner rejected claims 1-4, 6-8 and 10-19 as being anticipated by Searby (U.S. Patent No. 5,765,186). Claims 5 and 9 were rejected under Section 103(a) as